

though for training work the machine is usually fitted with the more normal tail skid.

CADET DATA:—Span, 30ft.; length, 24ft. 9in.; all-up weight, 2,000 lb.; weight empty, 1,286 lb.; maximum speed, 116 m.p.h.; cruising speed, 100 m.p.h.; landing speed, 43 m.p.h.; rate of climb, 700 ft./min.; service ceiling, 12,000ft.; and cruising duration, 3.25 hr.

Makers:—A. V. Roe and Co., Ltd., Newton Heath, Manchester, 10. (Collyhurst 2731.)

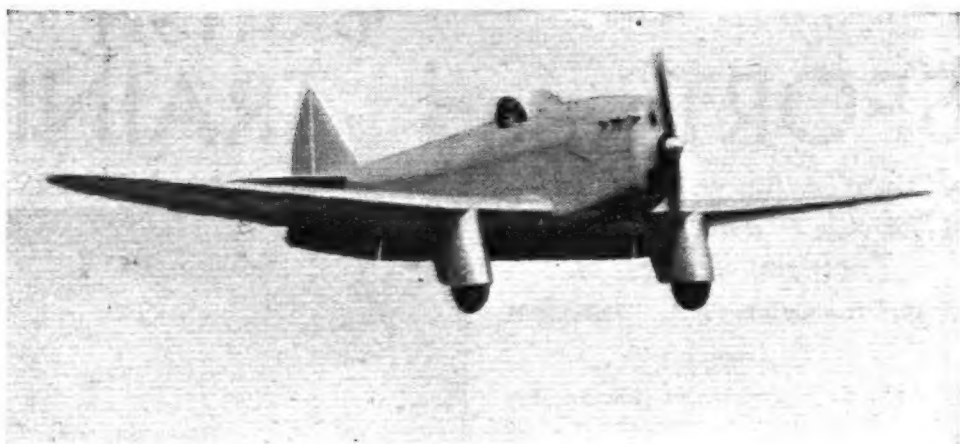
CHILTON

THE single-seater type of machine has always tended to have a doubtful reception amongst the prospective purchasers, but for those who require such a machine the Chilton monoplane certainly possesses a remarkable performance even when fitted, in its standard form, with a Carden-Ford engine of only 32 h.p. With this unit the maximum speed is 112 m.p.h., and a genuine cruising speed of 100 m.p.h. can comfortably be held.

Nor has this performance been obtained at the cost of safety from the point of view of the inexperienced pilot. The Chilton's characteristics even at low speeds are very normal and, indeed, better than the average.

Naturally enough, every effort has been made to make the design a clean one, and the process of approaching and landing is simplified in these circumstances by the fitting of mechanically operated split flaps. The construction is of stressed plywood, and the wide-track undercarriage has a travel of four inches. The machine can be flown without goggles and even without a helmet, and there is ample room in two luggage compartments for light luggage.

When fitted with a rather more powerful engine the performance is even more remarkable. With a 44 h.p. Train, for instance, the maximum speed goes up to 125 m.p.h. and the rate of climb to 1,000 ft./min.; while the range is reduced only from 500 to 400 miles. In this case, however, extra tanks can be carried to increase this range to 1,000 miles. In the spring, when this engine has become available, the designers hope to fit a Cirrus Midget engine, which will



Remarkable for its high top speed with a mere 32 h.p. for locomotion, the Chilton is, nevertheless, easy and safe in its characteristics.

convert the machine into one of relatively high performance and make it especially suitable for aerobatic training.

A somewhat larger machine is now under construction, but no details are yet available.

CHILTON (Ford engine) data:—Span, 24ft.; length, 18ft.; all-up weight, 640 lb.; weight empty, 398 lb.; wing-loading, 8.3 lb./sq. ft.; maximum speed, 112 m.p.h.; cruising speed, 100 m.p.h.; landing speed, 35 m.p.h.; rate of climb, 650 ft./min.; range, 500 miles; and price, £315.

Makers:—Chilton Aircraft, Hungerford, Berks. (Hungerford 26.)

CHRISLEA

A NEW type to be considered as being particularly suited to C.A.G. requirements is the Chrislea, which is a side-by-side two-seater cabin low-wing monoplane. It was, however, designed, and the work of building the prototype had been started, before the details of the cheaper flying scheme had become public property.

Although, with the excellent view provided for both occupants and the normal flying characteristics which the initial test flights have shown, the Chrislea should make a good trainer, it was designed primarily to interest those private owners who require a good performance, comfort and reasonable roominess at economical first and later costs. The engine is a Walter Mikron II and this, it is ex-

pected, will be shortly put into production by an associated company.

The machine, which is known as the Airguard, has a number of interesting structural features. One of these involves an ingenious wing-folding arrangement in which a universal joint is fitted to the rear spar roots so that the wings can be pulled back and turned vertically before they are swung against the fuselage. In order to provide a good all-round view, the two top longerons of the box-type fuselage are dropped several inches at the rear of the cabin to give a low waistline where this is most necessary. The result is that the occupants appear to sit very high up behind a deep screen, and even on the ground it is possible for either occupant to see out on both sides. Manually operated three-position flaps are fitted on each side of the fuselage and extend out to the ailerons. The undercarriage is of the simple half-fork-type, compression being taken by eight rubber buffers, and it is claimed that either of these legs can be detached from the main spar and replaced in less than half an hour. There are dual rudder pedals and a centrally disposed control column.

Complete load and performance figures are not yet available, but the machine is to be sold for £550.

Makers:—Chrislea Aircraft Co., Ltd., Heston Airport, Middlesex. (Hounslow 2345.)

COMPER

INGENIOUS design might be expected in a machine from Flt. Lt. Comper's drawing board. Many years ago he produced one of the most successful and pleasant single-seaters, and recently he has been working on a new type for primary training. In this, which is known as the Scamp, every effort has been made to provide a type which will be as nearly fool-proof as possible, and which, at the same time, will be cheap to manufacture.

The Scamp is a high-wing pusher with a tricycle undercarriage, and the prototype is being made, in single-seater form, by the College of Aeronautical Engineering at Brooklands.



One of this year's arrivals—the Chrislea monoplane. When this photograph was taken at Heston the machine was going through its early tests and was neither painted nor spatted.